

5. On some apparently new Marsupials from Queensland.

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(Plates XXIX.—XXXII.)

A Norwegian traveller, Dr. Lumholtz, of Christiania, who has now spent four years in Northern Queensland, collecting specimens of natural history for the University of Christiania, has just sent to our Zoological Museum a fine collection of mammals, birds, reptiles, and fishes, besides invertebrates. In giving these short descriptions of a few of the mammals, which I think may be undescribed, I take the opportunity to offer my best thanks to my friend Mr. Oldfield Thomas, for the kind assistance he has given me when examining the skins of the Marsupials in the British Museum, and comparing them with Dr. Lumholtz's specimens.

1. PHALANGISTA (PSEUDOCHIRUS) ARCHERI, sp. nov. (Plate XXIX.)

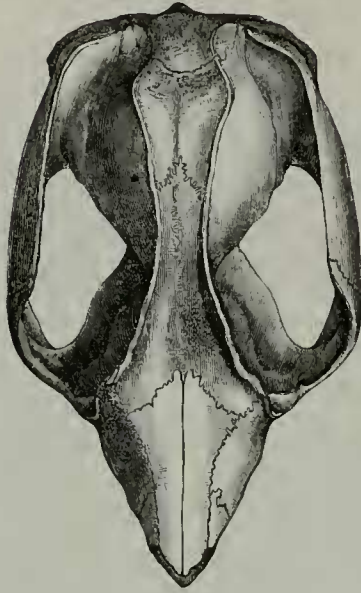
General characters.—*Male.* Mottled yellowish green above, with whitish lines on the back; lower side white. Tail with short hairs on its apical third. Ears short, rounded, with short hairs.

Description.—Upper parts a peculiar mixture of yellowish green, white, and grey, the root of the fur bluish grey; two indistinct stripes of silky white are visible on the back, the tips of their hairs being yellowish; a short and narrow black line from occiput along the middle of the nape. Lower parts white; the chin greyish white. Head: snout ashy grey; a white semilunar spot under the ear, and a small pale yellowish one above and under the eye; the eyelids are dark brown. Ears short, almost hidden in the fur, greyish externally, bordered with white; hairs short; inner surface almost naked. Nose fleshy brown; the naked area narrow below (3 millim.), the upper lip being haired almost to the central groove. Limbs yellowish grey, the base of the hairs grey like the back; the fore limbs whitish on inner side. Claws pale yellow. Tail on its first third very thickly clad with woolly hairs, yellowish grey above and underneath, everywhere with interspersed long whitish hairs; the apical third (short-haired part) whitish; the naked line on lower surface of moderate length, not reaching half the length of the tail.

Skull.—Much like the skull of *Phalangista albertisii*, described by Peters and Doria in Ann. Mus. Genova, vol. xvi. tab. viii. and ix. fig. 2. *Ph. archeri* differs, however, in having the parietal crests diverging and finally converging, instead of regularly converging, as in *Ph. albertisii* (if the figures on the plates quoted are correct). In *Ph. archeri* the profile of the skull seems more oblique in the post-parietal region and the nasal bones to be shorter behind, as in

Ph. albertisii. Length of the skull 65 millim., the greatest breadth 39 millim.

Fig. 1.



Phalangista archeri ♀.
Skull, view as seen from above.

Teeth much like those of *Ph. albertisii*. In the upper jaw the incisors are 3 in number; the first long, canine-like, its length from the maxillary 5 millim.; the second short, compressed, with flattened crown, more like a small premolar; the third very small, shorter than the canine (in *Ph. albertisii* the canine is the longer of the two). The canine is small, pointed. The first premolar small (very much like the third incisor); the second somewhat larger, with two cusps; the third still larger, and with two large and two small cusps. The four molars large.

In the lower jaw the incisor is very large, directed almost horizontally, its length from the mandible 8 millim. The next tooth is very small, close to the root of the incisors, and may be regarded as the second incisor. The single premolar large, but not broad, with three cusps. Then follow the four molars, much like those in the upper jaw.

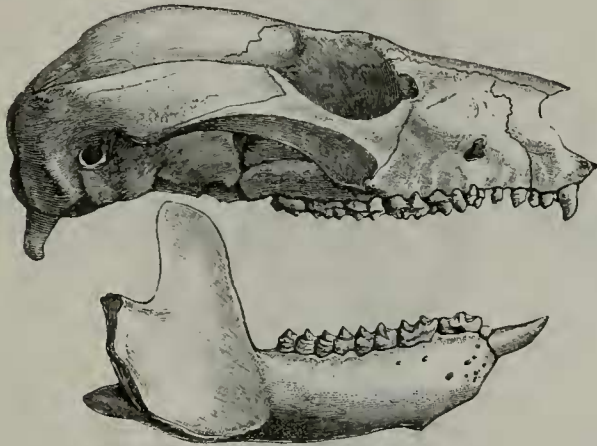
In the upper jaw the canines and the first premolar are separated from the other teeth by a short distance; in the lower jaw all the teeth are closely set.

Dental formula:—m. $\frac{4}{4}$, p. $\frac{3}{1}$, c. $\frac{1}{0}$, i. $\frac{3-3}{2-2}$, c. $\frac{1}{0}$, p. $\frac{3}{1}$, m. $\frac{4}{4}$ =36.

Length of the body about 300 millim., of the tail about 290 millim.

Hab. Northern Queensland, legit Dr. Lumholtz, 1883. (One specimen, preserved in the University Museum, Christiania.)

Fig. 2.



Phalangista archeri, ♂.

Side view of skull. Side view of lower jaw.

2. PHALANGISTA HERBERTENSIS, sp. nov. (Plate XXX.)

General characters.—Brownish black above; lower surface white or whitish. Tail with short hairs in its apical third. Ears small, black.

Description.—*Male.* Upper parts: head with chin and back blackish brown, with numerous interspersed reddish-brown hairs; the root of the fur blackish. Lower parts white, this colour covering the throat, belly, and inner side of the limbs. Ears short, rounded, black; with short hairs; length from their anterior base 13 millim. Nose broad, blackish, the shortest breadth of the naked area being 8 millim. Limbs black, with a broad white ring round the elbows; the hind feet black above, white on inner side. Claws pale yellow. Tail deep black, the apical third white; the naked line on lower surface very long, about two thirds of the length of the tail.

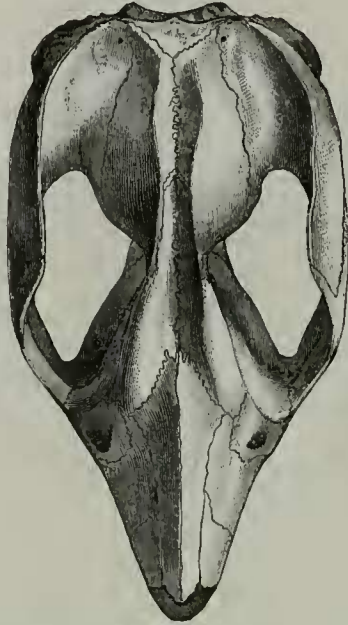
Length of the body about 310 millim., of the tail 280–300 millim.

Female. Another specimen from the same locality, a female, comes very near the male described above; but the lower surface is not snowy white, but greyish white, and no trace is visible of the white ring round the elbows. The back is of a more reddish brown.

Skull.—A deep groove between the frontal crests; the parietal

crests are flattened behind¹, and converge towards the occipital bone. The nasal bones converge to a common truncated point in the frontals.

Fig. 3.



Phalangista herbertensis, ♀.
Skull, viewed from the top.

Teeth.—*Upper jaw.* The incisors are three, closely set; the first is large (length from the maxilla 5 millim.), but is only half the length of the first lower incisor; the second and third are small. The canine is separated by a considerable space from the incisors and the first premolar: it is small (of the same size as the second and third incisors). The first premolar small, not larger than the canine; second premolar larger, with 1–2 cusps; third still larger, but not reaching the size of the molars, dilated behind, and with 2–3 cusps. The four molars are large.

Lower jaw. The first incisor is very large, its length from the mandible 10 millim., directed horizontally; the second incisor is rudimentary, hardly projecting above the gum, and only visible in the skull. The canine is as rudimentary as the second incisor, and in both skulls only visible on one side. The single premolar situated close to the molars, and of nearly the same size, but wanting the central groove. The molars four; their series perfectly straight.

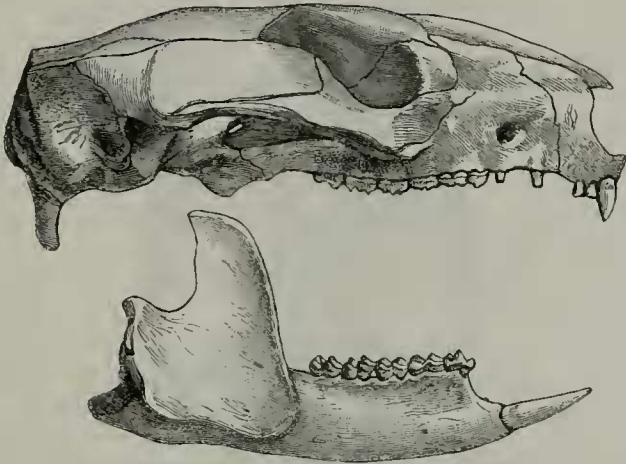
Dental formula:—m. $\frac{4}{4}$, p. $\frac{3}{1}$, c. $\frac{1}{1}$, i. $\frac{3-3}{2-2}$, c. $\frac{1}{1}$, p. $\frac{3}{1}$, m. $\frac{4}{4}$ = 38.

¹ In the female; the skull of the male is immature.

Hab.—Herbert Vale, Northern Queensland; legit Dr. Lumholtz, 1883. (Male and female, preserved in the University Museum, Christiania.)

Note.—*Ph. herbertensis* differs from *Ph. viverrina*, Ogilby (hitherto not very fully described), by its small ears and its brownish back.

Fig 4.



Phalangista herbertensis, ♀.

Side view of skull. Side view of lower jaw.

3. PHALANGISTA (HEMIBELIDEUS) LEMUROIDES, sp. et subg. nov. (Plate XXXI.)

General characters.—*Female.* Dark brownish grey, lower surface dirty yellow. Tail equally bushy to the tip, cylindrical. Ears small, rounded. Snout short. Eyes small.—This subgenus (*Hemibelideus*) forms evidently a transition stage between the true Phalangers and the genus *Petaurista*, having the skull, but not the patagium, of the latter, and the bushy cylindrical tail, but not the skull, of the Phalanger subgenus *Trichosurus*.

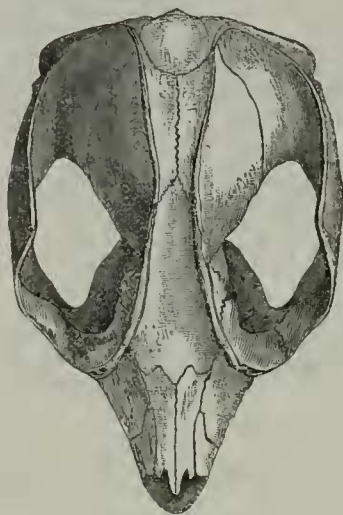
Description.—Upper parts dark brownish grey with silky gloss, grizzled with reddish brown on shoulders and ashy grey on lower back. An ill-defined black line from the nape down the back. The root of fur blackish-grey. Lower parts dirty yellowish grey, a clearer grey on the throat and inner side of the feet. Head coloured like the back, the face more interspersed with greyish hairs. Ears short, naked on inner surface; length from their anterior base 13 millim. Snout remarkably short and slender, the eyes small; distance from the eye to the tip of the nose 20 millim. The naked part of the nose small, blackish. Claws light grey. Tail bushy to the tip, the hairs of moderate length, black, lower side more greyish

on its first third. The naked line on lower surface of the tip very short.

Length of the body about 320 millim., of the tail about 290 millim.

Skull and dentition more like those of the Flying Phalangers (genus *Petaurista*) than of the true Phalangers of the subgenus *Trichosurus*, with which it has in common the bushy tail, but from which it is widely different in its skull and dentition. Frontal crests sharply defined from the beginning of the nasals; the parietal crests

Fig. 5.



Phalangista lemuroides, ♀.

Skull, seen from above.

widely diverging backwards. Frontals forming a common angle anteriorly, dividing the hind margin of the nasals.

Teeth.—*Upper jaw.* The three incisors closely set; first incisor long, separated by a short space from the other first incisor; its length from the maxillary is 4 millim. Second and third both small, the third being the smallest. The canine small, separated by a space from the incisors and the first premolar. First premolar very small, separated by a short space from the second; in size it is the smallest tooth in the jaw. Second premolar only half the size of the third, with two cusps; the third has three cusps. The four molars form a rather curved series, considerably converging behind.

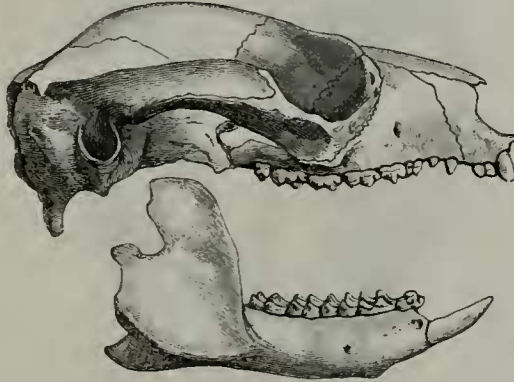
Lower jaw. Incisor long, its length from the mandible 8 millim., horizontal; second incisor absent; canine none. The single premolar rather large, but inferior in size to the true molars, and lacking the central groove. The molars forming a slightly curved series.

Dental formula:—m. $\frac{4}{4}$, p. $\frac{3}{1}$, c. $\frac{1}{0}$, i. $\frac{3-3}{1-1}$, c. $\frac{1}{0}$, p. $\frac{3}{1}$, m. $\frac{4}{4}$ = 34.

Hab. Northern Queensland ; legit Dr. Lumholtz 1883. (Female and young, preserved in the University Museum, Christiania.)

Note.—The young specimen, only half grown, is in every respect similar to the full-grown female except in size.

Fig. 6.



Phalangista lemuroides, ♀.

Side view of skull. Side view of lower jaw.

4. DENDROLAGUS LUMHOLTZI, sp. nov. (Plate XXXII.)

General characters.—Yellowish grey, the back grizzled with blackish ; snout, ears, fingers, toes, and occiput black ; the tail black on lower surface.

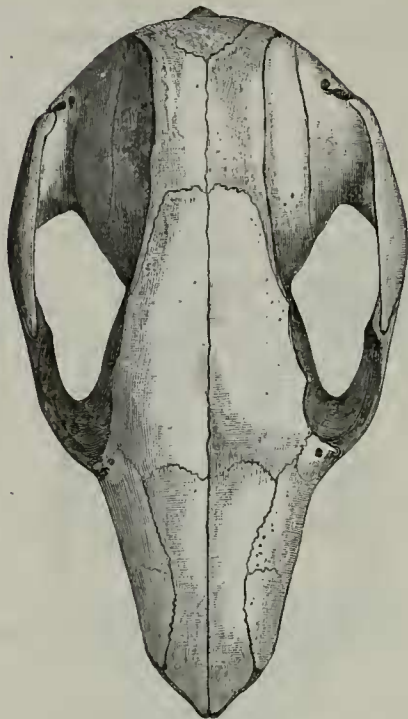
Description.—Upper parts grey ; on the back the hairs are blackish with pale bases and points, giving these parts a grizzly hue. On the vertex of the back the hairs are almost uniformly black, extending as a broad stripe upwards, and covering the occiput and the ears on their outer surface. The lower back is clearer yellowish grey, the blackish hairs being somewhat scarcer, but forming an indistinct dark patch on the root of the tail. Lower parts pale yellowish, deeper on the flanks ; the throat whitish. Limbs coloured on upper surface like the back ; on the metacarpus and metatarsus rusty red, with numerous interspersed black hairs. Fingers and toes deep black. Claws black. Head : the snout, chin, and lower jaw black ; the forehead grey, in some specimens more blackish or almost black. Tail pale yellowish grey above, with numerous black hairs ; lower surface black or blackish ; the tip in some specimens whitish. Ears short, covered with moderately long hairs ; external surface black, inner pale yellow.

Skull.—The skull and dentition seem not to differ in any essential way from that of the Papuan *Dendrolagi*.

Length of the body about 700 millim., of the tail about 680 millim. ; but the species is said to obtain a much greater size.

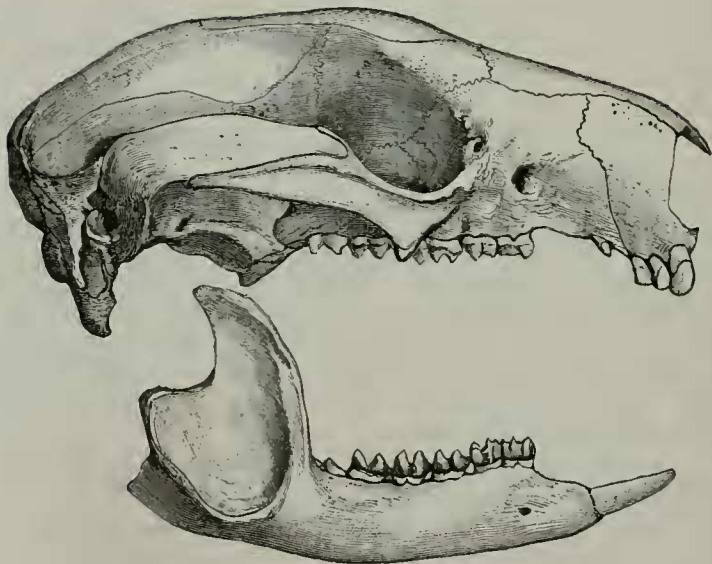
Hab. Herbert Vale, Northern Queensland ; legit Dr. Lumholtz,

Fig. 7.



Dendrolagus lumholtzi.
Skull seen from above.

Fig. 8.



Dendrolagus lumholtzi.
Side view of skull. Side view of lower jaw.

